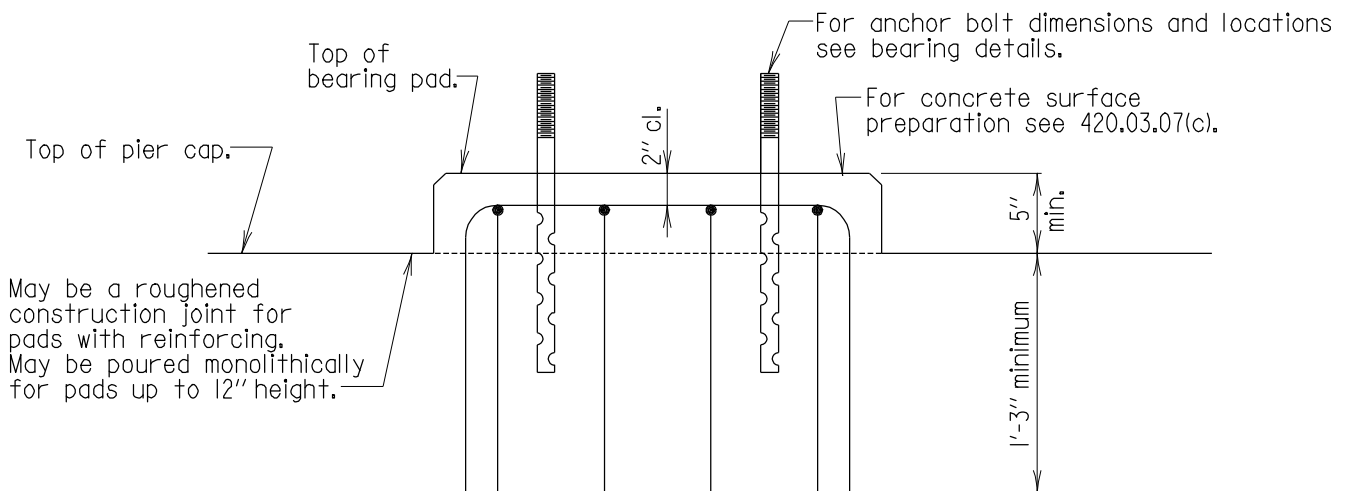


### PLAN

Scale: 1" = 1'-0"



### ELEVATION

Scale: 1" = 1'-0"

#### Notes:

1. Anchor bolts shall be set in round holes drilled or cored into the masonry.
2. The drilled or cored holes shall have a diameter of at least 1" larger than the diameter of the bolts.
3. Holes shall be filled with nonshrink grout conforming to 902.11(c).
4. For size of pad see pertinent substructure sheets, if not available see note in plan above.
5. Space reinforcing steel to clear anchor bolts.

APPROVAL	
<i>L.S. Friedman</i>	DIRECTOR
OFFICE OF BRIDGE DEVEL.	
DATE: 10/15/80	
REVISIONS	
SHA	FHWA
9-25-87	6-8-90
1-4-94	.
1-22-01	.
8-18-05	.

FHWA APPROVAL  
DATE: 2-27-81

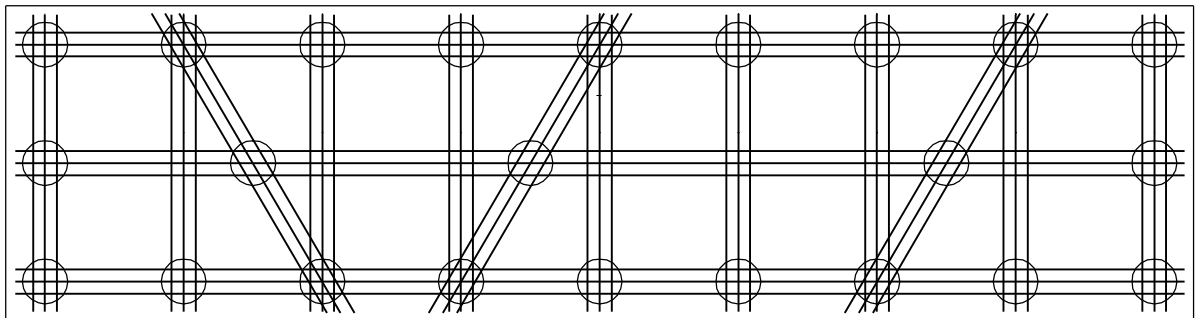
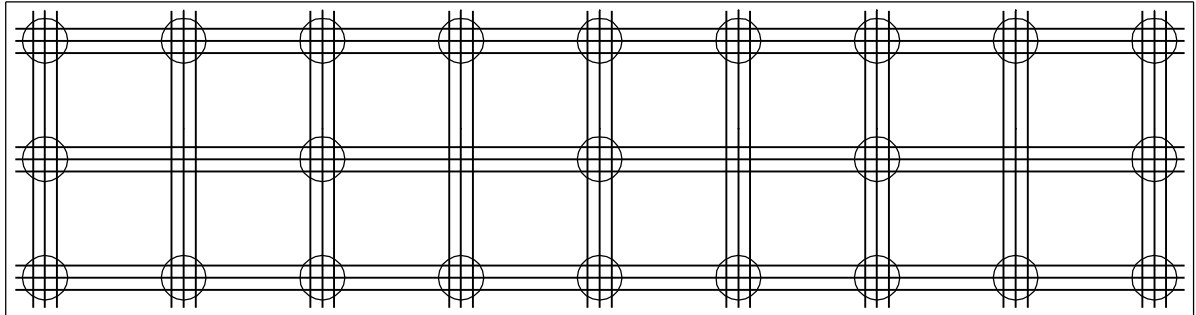
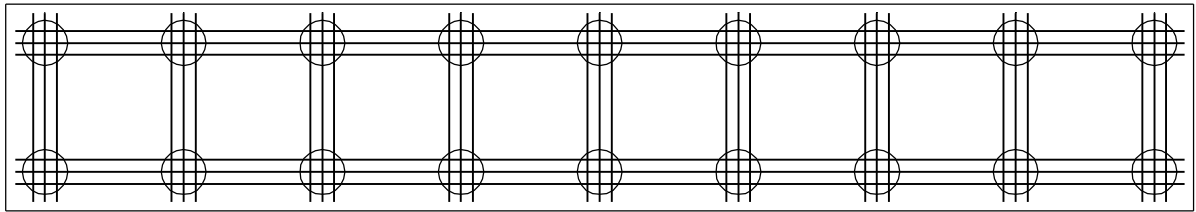
STATE OF MARYLAND  
DEPARTMENT OF TRANSPORTATION  
STATE HIGHWAY ADMINISTRATION  
OFFICE OF BRIDGE DEVELOPMENT

BEARING PAD WHERE ONLY A SINGLE SHOE  
IS REQUIRED ON A SUPPORT

STANDARD NO. BR-SB(6.02)-80-121

SHEET 1 OF 1

SUBSTRUCTURE GENERAL



### TYPICAL PIER FOOTING PLANS

Scale:  $\frac{3}{16}$ "=1'-0"

#### Notes:

1. All rebars shall be 3-#6 @ 4" c/c.
2. Lower mat of bars shall be 3" (vertical) above top of center line of pile.
3. All piles shall be crossed at least twice.
4. The direction taken by bars shall wherever possible be, the shortest distance between piles.
5. In all cases the total pattern shall be shown on Contract Documents.
6. O denotes all piling, cast-in-place, steel H piles, etc. When showing on Contract Documents H piles shall be shown with the normal "H" symbol.
7. In laying out pile plan, if possible, piles shall be positioned to minimize need for diagonal bars.
8. A note in area of rebar pattern shall appear on Contract Documents as follows "Shop plans shall show how rebars are to be tied as well as how they will be held in place above piling while pour is being made."

FOR OFFICE USE ONLY

APPROVAL	
<i>L. S. Friedman</i> DIRECTOR OFFICE OF BRIDGE DEVELOPMENT	
DATE: 10/14/82	
REVISIONS	
SHA	FHWA
1-22-01	

STATE OF MARYLAND  
DEPARTMENT OF TRANSPORTATION  
STATE HIGHWAY ADMINISTRATION  
OFFICE OF BRIDGE DEVELOPMENT

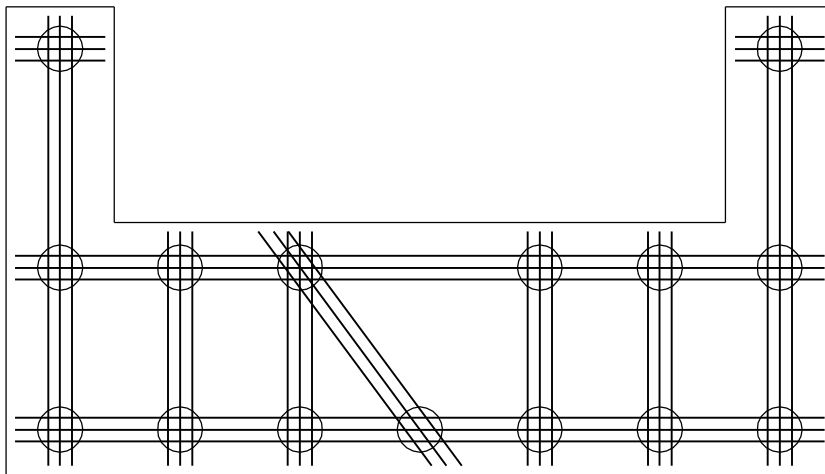
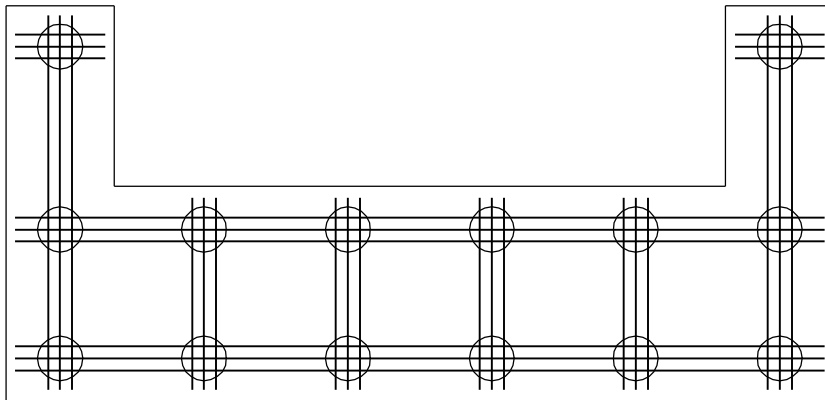
REBAR MAT PATTERN OVER PILING

FHWA APPROVAL  
DATE:

STANDARD NO. BR-SB(6.04)-82-132

SHEET 1 OF 3

SUBSTRUCTURE-GENERAL



TYPICAL ABUTMENT FOOTING PLANS

Scale:  $\frac{3}{16}$ " = 1'-0"

See notes on Sheet 1 of 3.

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APPROVAL	
<i>L.S. Friedman</i> DIRECTOR OFFICE OF BRIDGE DEVELOPMENT	
DATE: 10/14/82	
REVISIONS	
SHA	FHWA
11-30-87	.
3-22-89	.
1-22-01	.
FHWA APPROVAL	
DATE:	

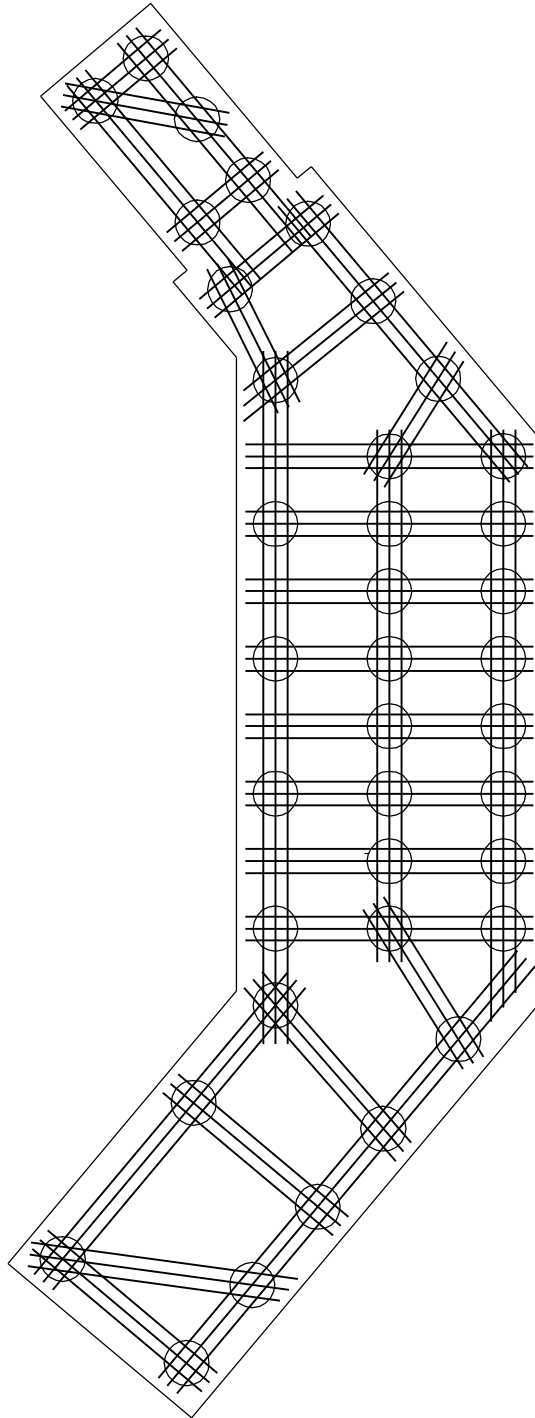
STATE OF MARYLAND  
DEPARTMENT OF TRANSPORTATION  
STATE HIGHWAY ADMINISTRATION  
OFFICE OF BRIDGE DEVELOPMENT

REBAR MAT PATTERN OVER PILING

STANDARD NO. BR-SB(6.04)-82-132

SHEET 2 OF 3

SUBSTRUCTURE-GENERAL



TYPICAL ABUTMENT FOOTING PLAN

Scale:  $\frac{3}{16}$ " = 1'-0"

See notes on Sheet 1 of 3.

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APPROVAL	
<i>E.S. Fadden</i> DIRECTOR OFFICE OF BRIDGE DEVELOPMENT	
DATE: 10/14/82	
REVISIONS	
SHA	FHWA
1-22-01	.
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STATE OF MARYLAND  
DEPARTMENT OF TRANSPORTATION  
STATE HIGHWAY ADMINISTRATION  
OFFICE OF BRIDGE DEVELOPMENT

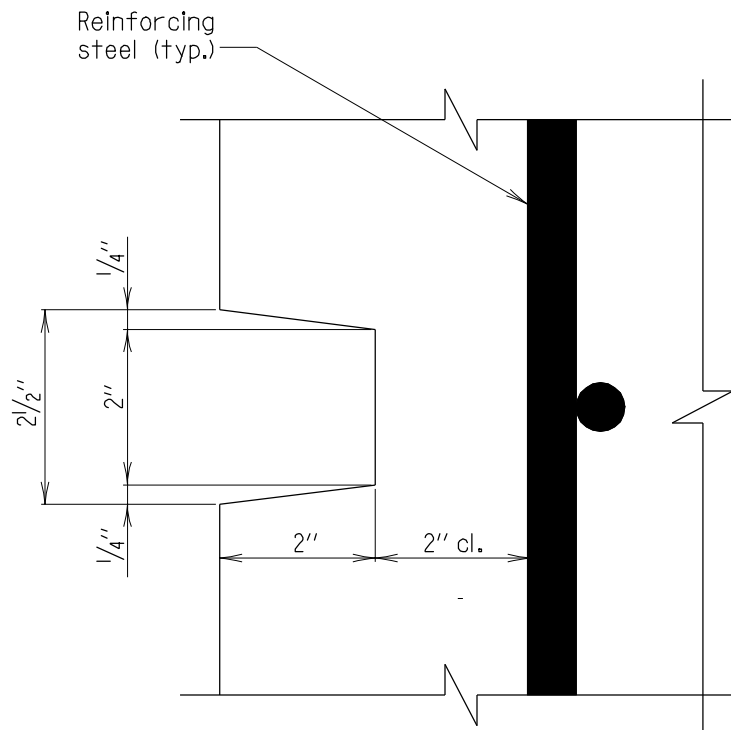
REBAR MAT PATTERN OVER PILING

FHWA APPROVAL  
DATE: .

STANDARD NO. BR-SB(6.04)-82-132

SHEET 3 OF 3

SUBSTRUCTURE-GENERAL



# GROOVE DETAIL

Scale: None

APPROVAL	
<i>E. S. Friedman</i> DIRECTOR OFFICE OF BRIDGE DEVELOPMENT	
DATE: 3/14/94	
REVISIONS	
SHA	FHWA
.	.
.	.
.	.
FHWA APPROVAL	.
DATE:	.

STATE OF MARYLAND  
DEPARTMENT OF TRANSPORTATION  
STATE HIGHWAY ADMINISTRATION  
OFFICE OF BRIDGE DEVELOPMENT

GROOVE DETAIL FOR  
SUBSTRUCTURE ELEMENTS

STANDARD NO. BR-SB(6.4I)-94-299

SHEET 1 OF 1

SUBSTRUCTURE - GENERAL